



## City of Shasta Lake

### 2011 Water Quality Consumer Confidence Report

### Public Water System Number 4510006

The City of Shasta Lake Water Utility is proud to report that it provided significantly higher quality water than required by the very stringent Federal and State Water Quality Standard during 2011. Water for the City of Shasta Lake originates from one surface water source known as Shasta Lake. For additional information or input concerning your drinking water, contact William Bishop at (530) 275-7450 or email [wbishop@cityofshastalake.org](mailto:wbishop@cityofshastalake.org)

Este informe contiene informacion muy importante sobre su agua potable. Traduzcalo o hable con alguien que lo entienda bien.

#### DEFINITIONS OF SOME OF THE TERMS USED IN THIS REPORT

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. **Primary MCLs** are set as close to the **PHGs** (Or **MCLGs**) as is technologically, and economically feasible. **Secondary MCLs** are set to protect the odor, taste, and appearance of drinking water.

**Primary Drinking Water Standards (PDWS):** **MCLs** for contaminants that affect health along with their monitoring and reporting requirements, and surface water treatment requirements.

**Public Health Goal (PHG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the Federal Environmental Protection Agency (USEPA). **Maximum Residual Disinfectant Level (MRDL):** The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**Maximum Residual Disinfectant Level Goal (MRDLG):** The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Regulatory Action Level (AL):** The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

**ppb:** parts per billion or micrograms per liter ( ug/l ), **ppm:** parts per million or milligrams per liter ( mg/l ), **nd:** non detectable at testing limit.

**TDS:** Total Dissolved Solids.

**THE SOURCES OF DRINKING WATER** (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. A *source water assessment* was conducted for the City of Shasta Lake's Raw Intake in January 2003. The source is considered vulnerable to the following activities not associated with any detected contaminants: Automobile gas stations, chemical/petroleum processing/storage, and concentrated aquatic animal production facilities as defined in the federal regulations. A copy of the assessment may be viewed at the City of Shasta Lake, 1650 Stanton Dr.

#### Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals that can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals that are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants**, which can be naturally-occurring or be the result of oil and gas production and mining activities.

#### GENERAL INFORMATION ON DRINKING WATER

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at 1-800-426-4791.

**SOME PEOPLE MAY BE MORE VULNERABLE** to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly individuals, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The USEPA/Center for Disease Control guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

#### WATER QUALITY DATA

##### WATER QUALITY CONTROL

Before the water reaches your tap, samples from the water distribution system and the water treatment plants are collected and tested in State-certified laboratories. The City of Shasta Lake Water Utility has a regular program of water analysis and system inspection which assures safe water for you

and your family. Treatment process consists of chemical coagulation, flocculation, filtration and disinfection. Two State-certified water plant operators assure that water treatment operations provide excellent quality water three hundred sixty-five days a year.

#### **MICROBIOLOGICAL WATER QUALITY**

Testing for bacteriological contaminants in the distribution system is required by State regulations. This testing is done regularly to verify that the water system is free from coliform bacteria. The minimum number of tests required per month is sixteen. In our distribution system, we obtain four water samples per week and test for coliform bacteria. The highest number of samples found to contain coliform bacteria during any one month was zero.

#### **LEAD AND COPPER TESTING RESULTS**

Lead & copper testing of water from individual taps in the distribution system is required by State regulations. The table below summarizes the most recent sampling for lead and copper. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Shasta Lake is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/safewater/lead>.

Lead and Copper	Year Tested	Number of samples collected	Number of samples required	90 <sup>th</sup> Percentile Result	Action Level
Lead (ppb)	2010	30	30	ND	15
Copper (ppb)	2010	30	30	115	1300

#### **CHEMICAL SAMPLING RESULTS SHOWING DETECTED CONTAMINANTS**

The following tables list all detected chemicals in our water during the most recent sampling. Please note that not all sampling is required annually so in some cases our results are more than one year old. These values are expressed in ppm unless otherwise stated.

Contaminants with Primary MCLs					
Chemical Detected	Year Tested	Level Detected	MCL	PHG or MCLG	Origin
Aluminum (ppb)	2012	73	1000	600	Erosion of natural deposits; residue from some surface water treatment processes
Chlorine	2010	2.00	4.0	4.0	Injection into water at plant for disinfection

Contaminants with Secondary MCLs				
Chemical Detected	Year Tested	Level Detected	Secondary MCL	Origin
Sodium (ppm)	2008	7	None	Runoff/leaching from natural deposits; seawater influence
Hardness (ppm)	2012	50	None	Naturally occurring
Chloride (ppm)	2012	1.2	500	Naturally occurring
TDS (ppm)	2003	64	1000	Runoff/leaching from natural deposits

#### **SURFACE WATER TREATMENT COMPLIANCE INFORMATION**

Our filtration system must meet a performance standard of less than or equal to 0.2 NTU in 95 % of the measurements taken each month. The highest single turbidity measurement for the entire year was 1 NTU. The lowest monthly percentage of turbidity samples meeting the performance standard was 99 %. Turbidity is a measurement of the cloudiness of water and one NTU is equivalent to one unit of turbidity.

**VIOLATION INFORMATION:** NONE (no violation occurred).

#### **OTHER MEASURES TAKEN TO INSURE SAFE DRINKING WATER**

A water main flushing program and cross connection control program are other measures taken to help assure safe drinking water. Water customers who receive this report are asked to share information with any tenant or water user on their premises. We think it is important for you, our customer, to have current and factual information about your water supply. The City of Shasta Lake Water Utility staff is available to answer your questions and provide further information to those who want it. You are welcome to call us at 275-7450 or 275-7400 or by email [wbishop@cityofshastalake.org](mailto:wbishop@cityofshastalake.org)

Information that deals with decisions about our water system is announced during the City of Shasta Lake Council meetings. The City Council meets on the first and third Tuesday of every month at 7:00 P.M. in the Senior Citizen Hall at 1525 Median St., Shasta Lake, 96019. 530- 275-7400.